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Inaugural Dissertation.

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on

W. E. H.

Puerperal Convulsions

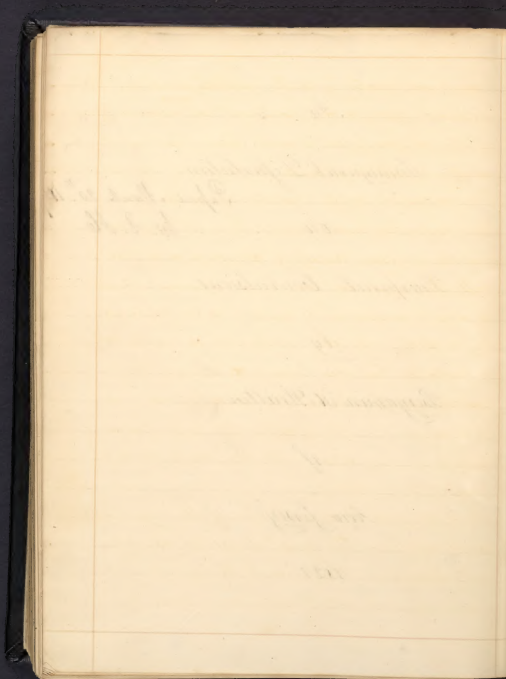
by

Benjamin A. Stratton

of

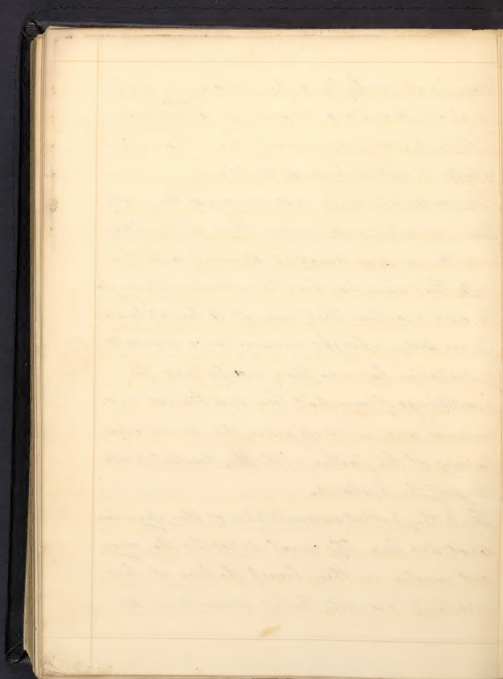
New Jersey

1827



There is not probably in the whole circle of  
medical practice a department of <sup>more</sup> responsi-  
-bility, physical and moral, than that which  
relates to obstetrics and the diseases of women.  
The wonderful variety and delicacy of the parts,  
their properties, and powers. Their infirmities,  
and the necessary remedies, demand a skilful-  
-ness, that never has been too industriously sought  
for, and a caution that cannot be too delibera-  
-ly practised. A slight indiscretion or momenta-  
-ry hesitation has more than once shattered the  
heartstrings of conjugal love, and buried in a  
common, and untimely grave, the fondest expec-  
-tations of the father with the desolated affec-  
-tions of the husband.

But the fearful responsibilities of the physician  
do not stop here. His moral duties tho' they may  
not involve in their breach the lives of his  
patients are not the less tremendous as



regards the public or himself. In the one case, existence of the sufferer, as well as his own character for skill, must fall a sacrifice to his incapacity or neglect. In the other he strikes a death blow to female delicacy, and drags upon his non-defenceless head the more aggravated dishonour, and honest indignation he deserves.

After these few preliminary observations upon the double responsibility so seldom incurred under our present system; upon a rule of acting so frequently inculcated and so constantly followed by those for whom this dissertation is prepared; I will pass on to the subject upon which I have proposed to write.

The practice of obstetrics with much appearance of propriety was long exclusively confined to females; but their ignorance and incapacity, together with the increased difficulty, which the luxury and refinement of modern times has produced among



us; demanded a higher degree of skill than women have ever attained or from the nature of their avocations are likely to arise at. The experience of more than a century has taught us that the change has been for the better. Much fewer deaths have occurred, the labours of women generally have been of shorter duration, less painful and laborious, when attended by a skilful accoucheur; and their situation after difficult labours better.

Puerperal convulsions may be considered among the most frightful and alarming diseases that attack pregnant women during gestation, or parturition. Fortunately the disease is of rare occurrence in comparison with the number of births. Why they are sometimes attendant on the gravid uterus yet remains unknown to the profession; yet they do not always steal upon us so insidiously; nor is their commencement at all times so sudden but that





we are aware of their approach. By attention to the premonitory symptoms we may know how to control and prevent them, and can rob labour of one of its greatest terrors. The immediate cause of attack is frequently unknown, and sometimes is so sudden, and fatal, that the power of art is even unable to prolongate the fatal termination.

By Mr Burns and Dr Jucius alone, have I found the disease divided into species. By this judicious arrangement the student's attention is drawn more closely to the subject, and he understands the disease more clearly, than from the confused account given by Boerhaave, and Hamilton. The light they have thrown upon this subject is not sufficient to guide the student through its multifarious perplexities, but only serves to show him the apparently difficult labyrinth in which he is involved. Their manner of describing and prescribing for the disease has another objection.



The student frequently passes over the subject as mentioned by Boerhaave and Hamilton, as too obscure, and difficult to be comprehended, or supposes the disease to be rarely met with; but the man, who from this, or any other cause neglects to acquaint himself with any thing that belongs to his profession, may pay dearly for his indolence.

Dr. Denon has with much appearance of propriety divided puerperal convulsions into three species; to each of <sup>which</sup> species he has portrayed the symptoms, and prescribed the plan of treatment, with propriety and clearness. By this judicious division, the young practitioner may know to which species he is actuated, and the proper plan of treatment in it, without any great danger of prescribing that which is a remedy in one species, and an evil in another. They are divided into, first Epileptic, second Apoplectic, and third Hysterical, each of which may attack under different & distinct conditions of the



along, by which constituting our plan of treatment must in some measure be governed.

Conversions are most generally preceded, by symptoms that indicate their approach. In the epileptic showing the preliminary symptoms exist for days before the attack, and should be guarded against immediately. In this species the of a determination of blood to the head, and an engorgement of the vessels of the brain indicated by headache of peculiarly intense nature, ringing of the ears, temporary loss of vision, vertigo &c. all which symptoms are present for a longer or shorter time, before the convulsions commence. When told by a pregnant woman that she is affected as has been related, we should always bleed in quantity according to the violence of the affections, directing in addition to this proper purging, and low diet, as counteracting against this terrible insidious. Some are first attacked with pain in the stomach, and this by Dr. Denman is considered a more dangerous



1  
some time when the onset of the first of the  
paroxysms commencing with dyspnoea.  
and some are not always fatal.

Then, however, I introduced to the instruction  
of convulsions, it is almost always at that period,  
when the uterine fibres are at their greatest stretch  
and when the stimulus is disposed to irritate; or where  
there exists some peculiar irritation (over which we  
have no control) even to convulsions. The uterine  
fibres are the same effect; and such convulsions are  
almost always of the epileptic kind.

I think of London, and occasionally in the  
course of the disease of a woman labouring  
under convulsions, and found the uterus ceased to  
contract during the fit, and appeared to flaccid.

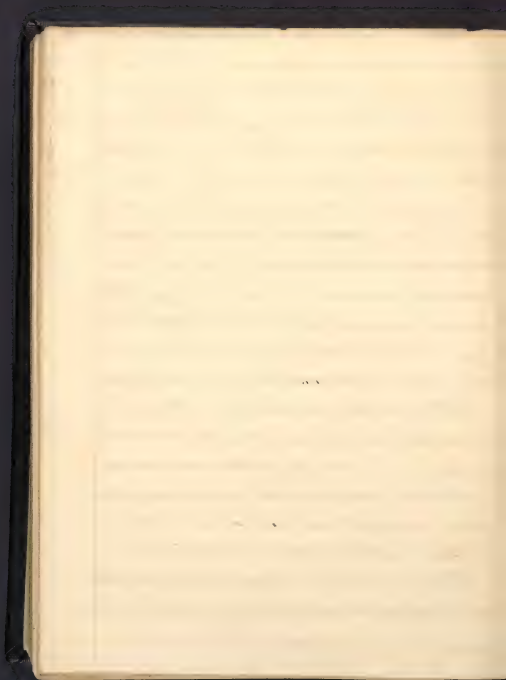
These convulsions either soon chiefly not attendant  
on pregnancy, so not being preceded by aura epileptica  
After the patient has suffered, for a longer or shorter  
time, with the numerous symptoms mentioned,



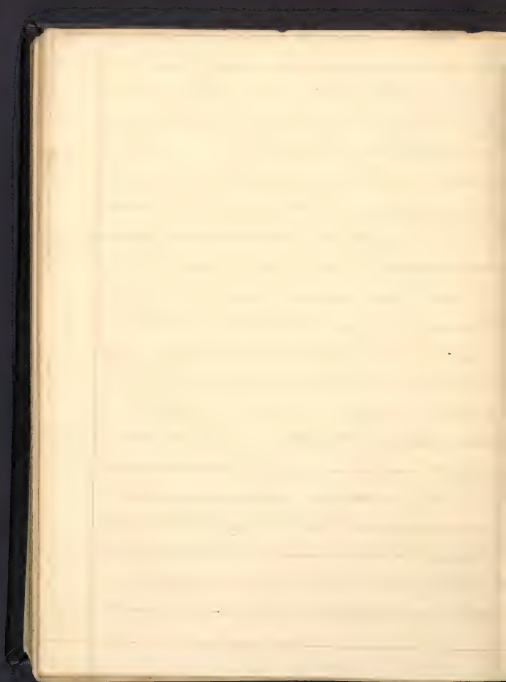


she is suddenly attacked with spasms, quickly follow-  
 ing each other - The face, and eyes are twitched in  
 a variety of directions, and with inimitable quick-  
 -ness - The arms, legs, and whole body, sometimes  
 are more or less violently agitated - In some cases  
 one side is more affected than the other, at times  
 whilst one is much disturbed, the other is con-  
 -servative, & tranquil - The face becomes, first,  
 -red, then, "and sometimes as black as a negro." The  
 tongue is thrust between the teeth by which it is  
 much bitten - Froth issues from the mouth, tinged  
 with blood, from the wounded tongue - Respiration  
 is hurried, and laborious, afterwards almost sus-  
 -sended - Great throbbing of the carotid arteries,  
 with much distention of the jugular veins, takes  
 place - A peculiar sibilating noise is made  
 by the mouth, resembling "a cat's pissing" -

Pulse at first is full, frequent, and tense, but  
 soon becomes weak, small, and, finally, almost



imperceptible. - The urine and feces are some-  
times discharged involuntarily. A cold clammy  
sweat, bedewing the whole body as the fit is about  
to subside... "The fit may last but a few minutes  
or may continue with little remission for half an  
hour" The convulsive movements gradually subside, but  
never suddenly - Their force and frequency abate.  
Pulse becomes more distinct, and less frequent.  
Respiration changes to be less hurried, and more  
regular. The face loses some of its lividity - The  
muscles are agitated but at intervals. This  
agitation has been compared to an electric shock  
passed through the system. At length the  
patient sinks for an irregular period into repose,  
but not a natural one. The patient lies insensible,  
or comatose, with stertorous breathing, or loud snoring,  
from which state she is roused but with difficulty.  
If she be roused but for a moment, she quickly  
relapses into sleep again. This stage is of short



durations, convulsions, & slow convulsions without our being able to determine their cause, or time of return.

Besides the symptoms that have been noted, there are others that indicate the presence of labour.

There is a return of the convulsions when the pains come on, and although the patient is insensible to external occurrences, yet by her involuntary restraining of respiration she shows her sensibility to uterine contractions. Dr. Pomeroy remarks that great inclination in the patient to escape from the bed, is a pretty certain sign of labour going on. When convulsions have taken place, or in fact sometimes before the commencement, the countenance becomes reser, especially the eyelids, more light, even the whole body partaking more or less of this appearance. In some cases does not immediately subside with the resumption of the fits, but often remaining, for days or upwards. Dimness of



vision, and even blindness is not unusual, for  
days after the cessation of convulsions.

Of the progress of the disease not much can be  
said. The longer the convulsing symptoms exist,  
the less the danger, and thus it is in proportion to  
the violence of the symptoms.

Having dealt so fully on the epileptic species,  
it will not be necessary to describe the apo-  
plectic & minimally, as nearly the same pneu-  
matic symptoms include its symptoms. All is  
attended by the same train of symptoms, but they  
are of shorter duration, and if produce them of a  
greater flow of blood to the head, and in pro-  
portion of the vessels of the brain.

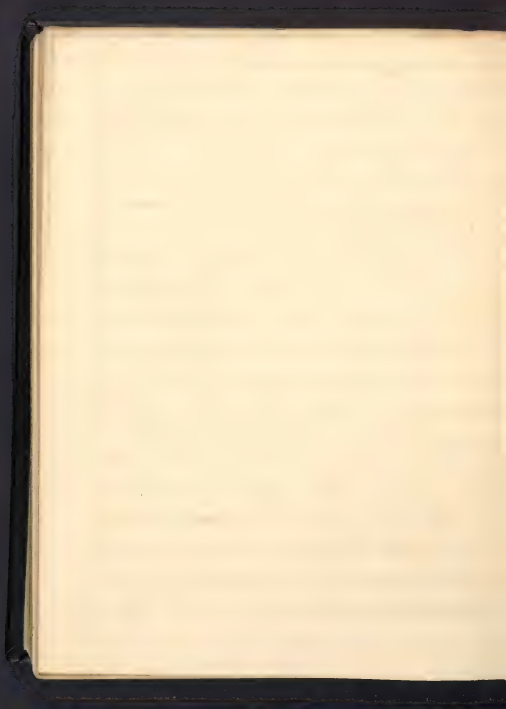
Apoplexy may attack women labouring, or during  
posturition, with, or without convulsions; but when  
labour is present, it greatly contributes to them.  
When apoplexy takes place during gestation, the  
uterine vessels are affected, but it is found sometimes





distended, or it is much dilated. This species is gene-  
rally attended <sup>the</sup> with vomiting, which always char-  
acterizes the first species.

In the Hysterical species, we have not all the  
inconsond symptoms that indicate the approach  
of the others. There is not intense headache,  
convulsed face, and excitation of the eyes to the same  
extent. There is ringing of the ears, globus hysteri-  
cus, and palpitation of the heart. The great mus-  
cles of the back contract, so that the body forms  
an arch, the head and neck approach each  
other, when the case is violent. These affections  
always distinguish this species from either  
of the others. The face is pale, flushed, and there  
is no spitting at the mouth. The patient, altho  
the fit, can be roused and her speech becomes co-  
herent. When her attention returns she knows not  
what has happened, but is frequently seized with  
a sense of shame, and sinks down in the bed.



encouraging to lie on her back beneath the bed-  
cloathes. In this species the pulse is much  
less disturbed, nor does it acquire so great a  
velocity, and lenity as in the epileptic and  
apoplectic. Hysterical convulsions are more com-  
mon during gestation than parturition.

M<sup>r</sup> Binn after uniting of the different species  
of convulsions observes "that convulsions of the  
kind I have been considering, even tho' are com-  
mon with gestation, or parturition, they occur at no  
subsequent period, and are more frequent in first  
labours. They arise particularly from uterine ex-  
citation, but also seem frequently to be connected  
with a neglected state of the bowels."

But one case where post mortem examination of  
a woman dying of this disease was made, have I  
met with, and that is narrated by Dr Dewees, He  
observes "that the longitudinal sinus of the dura ma-  
ter contained (by estimate) between two and three



amount of blood; the anterior left ventricle, was  
filled with a bloody serum - the other ventricle  
a greenish serum, as did the other parts of the  
liver - no other part <sup>was</sup> examined "

Although this is merely the examination of  
one case, no doubt the like appearance, distensi-  
on of blood, and serum within the brain  
would be found in all "

Treatment - What should be done when the  
convulsive symptoms indicate the approach of  
convulsions has already been mentioned. In  
the treatment of the epileptic species, the debar-  
cation of blood is indispensable; without it all other  
efforts will be abortive - The operation of catan-  
tizing, or any other mode of depletion, or to slow the  
pulse, or even to produce a fatal termina-  
tion of the disease - Besides by bleedings in spe-  
cifics, and better ensure the effects of cathartics, and



other remedies. In cutting, should not be done  
 liberally, or sparingly. We must bleed again and  
 again "until the symptoms are mitigated, or the  
 disease subdued, and the operation must be repeat-  
 ed as long as the fits continue to occur, or the  
 system to indicate the repetition of them. More  
 injury has resulted from not detracting sufficient  
 blood, than from taking too much. There is great  
 authority for detracting immense quantities of  
 blood, more than we could theoretically suppose  
 one person could bear the loss of. The arm is gen-  
 erally chosen to bleed from as it is more conveni-  
 ent, and will answer as well in most cases as  
 any part that can be selected. The external  
 jugular vein, and temporal artery have had the  
 preference given to them by some, and in many  
 cases, perhaps when practicable, it would be best  
 to bleed from the jugular vein. So they there are  
 some objections. The recumbent posture, and the





agitation the patient is affected with, frequently  
 makes it difficult to operate. The objection to  
 bleeding, from the femoral artery is, that suf-  
 ficient blood cannot be drawn from it; the artery  
 being liable to contract too soon after being divided.  
 It should be borne in mind by the practitioner  
 that blood should be drawn from a large vessel,  
 as it is an established maxim, that when blood  
 is debauched rapidly, a much less quantity will suffice,  
 and the effect on the system is always more decisive.  
 Besides leeches, cupping is useful to apply to  
 the temples. To debauch blood more immediately  
 from the part most suffering - For addition to  
 bleeding, cathartics must be administered by  
 the mouth, when the patient can swallow.  
 Dr. Keel of Washington City considers calomel the  
 most efficacious. - This appears in some measure  
 to possess the property of an antispasmodic, be-  
 sides being cathartic; and, should suppress matter.



be most useful in those cases where the affection  
of the stomach, gives rise of the premonitory symp-  
toms. I feel remarkably, it highly in large  
cases, and it has been presented by my preceptor  
with great apparent advantage in several cases.  
Enemata are important auxiliaries to the remedies  
mentioned, and in very many cases may be used when  
cathartics cannot be swallowed. They expedite the  
operation of cathartics, and more effectually cleanse  
the rectum. It stands in minor cases, it one  
of the best and I perceive, is the only enema used  
by Dr Deane in his list of cases. The injection  
of 12 or 15 grs of tart. emet. is valuable in the treat-  
ment of this disease. Blisters are necessary  
whenever, when there is time, or their effects  
they are useful anywhere, but most so when  
applied to the head, or back of the neck. It  
is when applied to the back of the neck  
the affections of the head frequently relieved.



extinguishing it. Cold applications to the head by means of flannels, dipped in cold water, ice and water, or by means of cold water poured from a small distance above the head upon it.

The bladder of the patient must also be attended to and emptied if necessary by the catheter of its contents. A neglect of this, Mr. Barry observes, of itself is sometimes the cause of disease. Of the virtues of Eggot, Dr. Haenke, of Brunswick, who first called the attention of physicians of this country to the medicinal properties of Eggot, speaks in his directions for the exhibition of it. "When the hairs are transfused from the uterus to the other parts of the body, or to the whole muscular system, producing general peripheral convulsions. After previous copious blood letting, the Eggot concentrates all those misplaced labour being upon the uterus, which it soon restores to its appropriate action, and the convulsions imme-



-diately cease"

Of Delivery- Decision on this point is important. Mr. Bury observes that the position of suffering, from a disease, connected with the state of the uterus, and that state is to be gotten rid of, by terminating the labour- Even when convulsions take place very early in labour, the os uteri is generally open to a certain degree, and the abstraction of blood which has been resorted to, on the first attack of the disease renders the os uteri usually lax and dilatable. Convulsions may attack a woman when she has not yet arrived at the time for parturition, and there is no assurance that she is in labour, in that situation it would not be correct to produce delivery. The os uteri is not found in all cases dilated or disposed to dilate, and the possible distending it, <sup>in</sup> some cases advisable under any circumstances. Although the fits are caused by the





contents of the uterus, the getting rid of them by violence will not better the situation of the patient. Much injury and even death may result, from forcibly distending the uterus when there has been no danger existing, as a pretext for so doing; and much more danger may an operation of this kind would be during the existence of convulsions.

In the cerebral disease we may remove the cause & the symptoms delayed, in the epileptic, but to a greater extent, it is an incurable disease. we must stop until the pulse, better beneath the fingers, as there is greater danger of extravasation of blood within the brain.

In the hysterical species a somewhat different mode of treatment is to be pursued. When the symptoms are violent blood letting should, increase other remedies, the quantity being in proportion to the violence of the affection.



After a severe, and is a great cure to be employed.  
 ad. Pandanus may be given in infusion to  
 the violence of the affections, to which one, or two  
 leucosia full of acrobolia in some cases is  
 sufficient. In putrid cases Pandanus may not  
 the same objection to it as, as in the other  
 being. When it cannot be taken by the  
 mouth it may be given in injection. The dose  
 in that case being from ʒij to ʒiij.

I shall conclude my thesis by transcribing  
 three cases that occurred, in my father's, and pre-  
 ceptor's practice, as they differ in some partic-  
 -ulars, from those mentioned by P. Bonaf.

Oct 24<sup>th</sup> 1820 Day of eruption to wit. At 9<sup>th</sup> 3<sup>rd</sup>.  
 pregnant with her, first child, arrived about  
 12 o'clock at night. Found her in strong con-  
 -stipation. Bleed her 2 1/2 oz and gave 20 grs of calomel.  
 She was unable to answer correctly. At intervals  
 not exceeding half an hour the very violent



considered no dilatation; the os uteri by  
12 o'clock next day she had lost 80 lb; blood;  
and had no appearance of labour. Gave her one  
scruple of Ergot rubbed to a powder and dissolved  
in one ounce of boiling water. The convulsions  
were suspended for an hour or more and labour  
pains came on. The breech presented. The placenta  
again returned, and was very violent until  
the day following, which day is about 2 hours.  
The child was dead. By the use of blisters  
and the usual remedies she recovered. It is an  
interesting case to think the Ergot had some agency  
in suspending the epilepsy, during the time  
he remained free from its attacks.

Aug 26<sup>th</sup> 1826. Aged 16. A new delivery of her  
first child, a male, after a labour of ordinary  
duration, and of about 3 hours continuance. Her  
age 17, her stature small. The eyes much swollen  
in her face, and neck pressing to delivery.



Nothing unpleasant occurred for 22 hours after  
her confinement. I saw her next morn and  
found her suffering most excruciating pain  
in the stomach. The nurse had given her 35  
drops of laudanum before I saw her. Under the  
impression that the disease was colic from wind,  
I ordered its exhibition every half hour until ease  
should be procured. On the morning of the 28<sup>th</sup>  
she became more easy and slept some, but soon  
began to complain of pain in her head, and at  
6 o'clock had an epileptic fit. Bled her 4000 at 2  
bleedings, applied cold to the head, and gave her  
30 grs of calomel in two days after an interval of  
4 hours. Bled her for head, and back of the  
neck, and directed an injection of Test. Emul.

By long continued course of cupping the convulsions  
were subdued, and subsided. I am convinced  
that the laudanum was injurious, and that the  
commencement of the pain in the stomach was





nothing but epilepsy misplaced.

3<sup>d</sup> Sept 24<sup>th</sup> 1826. Was requested to visit M. R. a robust woman of 30 years of age in the ninth month of pregnancy - She was after a severe day's labour taken with a chill. Its subsidence left her with a high fever, and intense pain in the head as her pulse was full, and strong. Bled her 20 oz, and enjoined rest for the night - Was sent for in haste in the morning - Found the alarming symptoms much increased, constantly attempting to get out of bed - Eyes very red, eyelids, and lips much swollen, subsulting tendinum, and great pain in the head - Enquired if any thing stimulating had been given her, and learnt that two teaspoonsfull of C. Paregoric had been given to her by her friends, without my knowledge, or advice - Bled her three times during the course of the day, but could not procure any female friend who would consent to remain with



her owing to her bad character, and the worry about  
her - No medicine was given but a dose of calomel  
and Jalap which was rejected her stomach being  
very sick - A blister was applied to the forehead  
After the third bleeding in the evening she became  
more sensible, and said her head ached much, and  
that it was impossible to keep her hands and  
feet from twitching - She expired about 8 O'clock  
next morning - No symptoms of labour appeared,  
and her infant perished with her - I believe she  
was injured even by the small quantity of opium  
contained in the E Purgative that was taken by  
her

